F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			D. EXAMPLE PROJECT KEY NUMBER
21. TITLE AND LOCATION (City and State) Norfolk Public Health Building Parking Lot Repair Norfolk, VA (eVA Reg#PR7655378)		22. PROFESSIONAL SERVIC 2017	YEAR COMPLETED CONSTRUCTION ( <i>if applicable</i> ) 2018
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER Department of Forensic Science	b. POINT OF CONTACT NAME c. POINT OF CONTACT TELEPHONE NUMBER   Kevin Sheerin (757) 355-5908 kevin.sheerin@dfs.virginia.go		

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size and cost)

Project Manager to develop a design to fix a significant pavement failure at the Department of Forensics building in downtown Norfolk. Several attempts had been made by geotechnical engineering firms to fix this issue.

Design involved investigating the cause of the failure by meeting with City of Norfolk staff, along with Dominion Energy staff. It was ascertained that there were structural issues caused beneath the pavement by placement of conduit during the Tide Light Rail Project.

In order to fix this issue, surveys of the problem areas were performed, and additional geotechnical borings were taken. Pavement design calculations were conducted utilizing the Vaswani Method. Then a pavement repair plan was developed that included detour plans to keep the existing facility functional while the repairs were made. Use of CCTV inspections and as-built drawings helped the client avoid \$50K change order. Project also included preparation of specifications, cost estimates, review of contractor bids, along with construction management of the project.

## **PROJECT HIGHLIGHTS**

- TV Inspection of utility lines
- Geotechnical Investigations
- Meetings with Dominion Energy & City of Norfolk
- Site Investigations
- Parking lot repairs / renovations
- Complete construction plans
- Bidding assistance

PROJECT RELEVANCE		
Х	Engineering Designs & Detailed	
	Construction Plans & Specs	
Χ	Surveying	
Χ	Subsurface Investigations	

CONSTRUCTION COST: \$160K PERIOD OF PERFORMANCE: Oct 2017 – Jun 2018

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME Pinnacle Group Engineering, Inc.	(2) FIRM LOCATION ( <i>City and State</i> ) Chesapeake, Virginia	(3) ROLE Project Civil Engineer

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)			20. E>	(AMPLE PROJECT KEY NUMBER
21. TITLE AND LOCATION ( <i>City and State</i> ) VDOT Hampton Roads Bridge-Tunnel Expansion Project (Project No. 0064-M06-032) Norfolk & Hampton, Virginia		PROFESSION	22. YEAF NAL SERVICES NGOING	COMPLETED CONSTRUCTION ( <i>if applicable</i> ) Est. 2025
	23. PROJECT OWNER'S IN	FORMATION		
a. PROJECT OWNER VDOT	b. POINT OF CONTACT NAME James S. Utterback, PMP		c. POINT OF CO 757-858-6 James Ut	NTACT TELEPHONE NUMBER 776 terback@VDOT viginia gov

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size and cost)

Civil Engineering Project Manager for the septic field, pumping stations, treatment systems, and force main design for the \$3.3 B VDOT HRBT tunnel/roadway expansion project in Hampton and Norfolk on the state-owned public North and South islands for HRCP (Hampton Roads Connector Partners). Developed final designs of sanitary systems for coordination with all civil systemsdrinking water, fire-fighting water, and storm drainage systems. Coordinated with AOSE (Authorized Onsite Soil Evaluator) in the preliminary and final septic design, based on actual soil testing and soil specifications for the fill portions of the islands, where the islands are being expanded for added roadways and tunnel. Completed all project sanitary specifications, VDH (Virginia Department of Health) applications, and addressed VDOT, VDH and HRCP comments on plans and design reports until approved.

- \$3.3 Billion project
- Largest roadway project in VA history
- Septic Field Design
- Pumping Systems
- Force main design
- Treatment Systems
- Specifications

Calculations included spreadsheets for pump station and forcemain design. Buoyancy calculations were also performed for all pump station basins, septic tanks and treatment tanks.

Innovative pump station design was employed to allow for rest rooms for the proposed inspection booths allowing VDOT employees to be more productive.

Septic design utilized latest technology featuring ultraviolet treatment of sewage meeting all Virginia Department of Health TL2 and TL3 treatment requirements.

Prepared full specifications of septic system components per VDOT Road and Bridge standards.

Project to also include construction management phase services to include inspections, testing and certification of the 5 septic field systems being installed.

## CONSTRUCTION COST: \$3.3 B PERIOD OF PERFORMANCE: Month 2019 - Ongoing

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
_	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Pinnacle Group Engineering, Inc.	Chesapeake, Virginia	Civil Engineering & Septic Lead
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
D.	LRH Soil Consultants, Inc.	Virginia Beach, Virginia	Authorized Onsite Soil Evaluator

PRC	PROJECT RELEVANCE		
Х	Development of full designs		
Χ	Design analysis & construction phase services		
X	Engineering Studies		
Х	Investigations		
Х	Surveying		
Χ	Subsurface Investigations		
Х	Tunnel / Roadway Project		
Х	Utility Design		
Χ	Specifications		

